

OFFICE OF HEALTHY HOMES AND LEAD HAZARD CONTROL



OHHLHC Grant Programs Performance Report Third Quarter FY2004

September 2004

Quarterly Grant Programs Performance Report

June/Third Quarter FY2004

Summary

We are pleased to provide the Grant Programs Performance Report for the Third Quarter of fiscal year 2004. This report details accomplishments towards achieving key performance goals of the Office of Healthy Homes and Lead Hazard Control (OHHLHC). This information has been compiled from grantee quarterly and final reports, as well as Government Technical Representative (GTR) monitoring activities. The report includes information on activities occurring through June 30, 2004.

Over a year ago, we began issuing reports as a way to begin refocusing our efforts and attention towards achieving results by sharing performance highlights and concerns. Issuance of these reports came on the heels of establishing benchmark performance standards as a method of establishing performance targets and then gauging performance over time. Support for grantees has continued with the three person teams administering grants. The second quarterly conference call provided information and facilitated the exchange of ideas on overcoming common challenges. Specifically, the topics discussed included moving from start-up to production, collecting data and documenting results, and building and sustaining recruitment and outreach. In June, staff from HUD, EPA, and CDC and grantees from their respective programs gathered in Orlando at the tri-agency conference to share ideas about primary prevention, enforcement, and strategic planning.

While performance remained about the same from the previous quarter, it is still higher than the end of last year and not all data are currently available. Approximately 76 percent of grantees performed well in this past quarter, compared to slightly more than 75 percent in the second quarter. However, this percentage is still higher than the percentage of grantees performing well at the end of FY2003, when only 63 percent of grantees were rated as "on or ahead of schedule." Further, grantees under the Lead Hazard Control Grant Program continue to exceed production targets. Only two quarters into their grants, the FY2004 (Round 11) grantees have completed 4% of the nearly 12,000 units in the grant agreements. The Healthy Homes program has completed interventions in 2,191 units, trained 8,384 owner-occupants, property owners, remodelers, enforcement officials, grantees, and partner staff in healthy homes related issues, and reached more than 542,000 people.

OHHLHC Grant Programs Third Quarter FY 2004 Accomplishments

- 7,447 units made lead safe in FY2004 (88% of total goal).
- Tested more than 99,000 units for the presence of lead-based paint and lead-based paint hazards.
- 75.6% grantees performing well.

Overall Grantee Performance and Trends

OHHLHC Grant Program participants report quarterly on their progress towards meeting the goals and objectives outlined in their work plans. Government Technical Representatives (GTRs) assess this progress and rate each grantee on the major factors of their programs. The color coded ratings are as follows:

- **Green:** Grantee on or ahead of schedule with all performance factors. No action required.
- **Yellow:** Grantee behind schedule in one or more performance factors. Work out strategy required with monthly updates to GTR are required.
- **Red:** Grantee substantially behind schedule in one or more performance factors. Work out strategy and weekly reports to GTR are required. Grantee may be designated as high risk.

The following table shows that nearly 76 percent of the OHHLHC grantees are performing well, i.e. received “green” ratings from GTRs. It also shows that about 18 percent of the OHHLHC grantees received “yellow”, while about 6 percent of grantees received “red” ratings from GTRs indicating that the grantee was behind schedule or substantially behind schedule, respectively. These grantees will be required to provide monthly or weekly updates to GTR and may be designated as high risk.

Grantee Performance by Rating

	Green	Yellow	Red	Total
No. of Grants	133	33	10	176
% of Portfolio	75.6%	18.8%	5.7%	

Detailed Grantee Performance Breakdown

Grantee	State	Assessment	NOFA Fiscal Year	GTR
University of Alabama at Birmingham	AL	Green	01	Williams
City of Phoenix	AZ	Green	02	Slaten
Cochise County	AZ	Green	03	Morales
Phoenix Science & Tech.	AZ	Green	02	Slaten
Alameda County	CA	Green	02	Daly
City and County of San Francisco	CA	Green	03	Daly
City of Los Angeles	CA	Green	03	Slaten
City of Los Angeles	CA	Green	03	Slaten
City of National City	CA	Green	03	Slaten
City of San Diego	CA	Green	03	Slaten
San Diego County	CA	Green	99	Slaten
Denver	CO	Green	02	Slaten
Northeast Denver Housing Center	CO	Green	00	Darrow

Grantee	State	Assessment	NOFA Fiscal Year	GTR
Connecticut DEMO	CT	Green	03	Hornbuckle
Connecticut LHC	CT	Green	03	Hornbuckle
East Hartford	CT	Green	03	Hornbuckle
Hartford	CT	Green	00	Hornbuckle
Manchester	CT	Green	99	Hornbuckle
New Haven	CT	Green	00	Hornbuckle
New London	CT	Green	01	Hornbuckle
Stamford	CT	Green	00	Hornbuckle
Alliance LEAP 1	DC	Green	02	Hornbuckle
Alliance LEAP 2	DC	Green	03	Hawkins
District of Columbia	DC	Green	03	Hawkins
National Academy of Science	DC	Green	02	Hawkins
City of Jacksonville	FL	Green	03	Morales
Georgia Tech Applied Research Corporation	GA	Green	03	Pinzer
Cedar Rapids	IA	Green	01	Pinzer
City of Dubuque	IA	Green	03	Pinzer
City of Waterloo	IA	Green	03	Pinzer
Marshalltown City	IA	Green	02	Pinzer
Panhandle Health District	ID	Green	03	Daly
Chicago	IL	Green	99	Pinzer
City of Chicago	IL	Green	03	Pinzer
Illinois	IL	Green	99	Pinzer
Illinois Department of Public Health	IL	Green	99	Ashley
Kankakee	IL	Green	00	Pinzer
Madison County	IL	Green	01	Pinzer
Springfield City	IL	Green	02	Pinzer
St. Clair County	IL	Green	02	Pinzer
University of Illinois	IL	Green	03	Pinzer
University of Illinois -- Urbana Champaign	IL	Green	03	Pinzer
Healthy Homes Network	KS	Green	02	Slaten
State of Kansas	KS	Green	03	Slaten
Acorn	LA	Green	03	Hawkins
Tulane University	LA	Green	03	Pinzer
Xavier University (HBCU)	LA	Green	03	Domneys
Boston	MA	Green	00	Baker
Boston DEMO	MA	Green	03	Hornbuckle
Cambridge	MA	Green	99	Pinzer
Harvard School of Public Health	MA	Green	00	Ashley
Lawrence	MA	Green	00	Hornbuckle
Lowell	MA	Green	99	Pinzer
Massachusetts	MA	Green	02	Pinzer
Radiation Monitoring Devices	MA	Green	01	Pinzer

Grantee	State	Assessment	NOFA Fiscal Year	GTR
Somerville	MA	Green	00	Hawkins
The Medical Foundation/NE Asthma Regional Council	MA	Green	03	Pinzer
University of Massachusetts Lowell Research Foundation	MA	Green	02	Pinzer
Baltimore City	MD	Green	99	Hawkins
Coalition to End Childhood Lead Poisoning	MD	Green	02	Hawkins
National Center for Health	MD	Green	02	Hawkins
National Center for Healthy Housing, Inc.	MD	Green	02	Hawkins
National Center for Lead Safe Housing	MD	Green	02	Hawkins
National Coalition for Lead Safe Kids	MD	Green	03	Hawkins
Natl Ctr. For Healthy Housing	MD	Green	04	Hawkins
State of Maryland	MD	Green	03	Hawkins
Auburn	ME	Green	01	Morales
Maine	ME	Green	02	Morales
Portland	ME	Green	01	Hornbuckle
City of Kansas City, MO	MO	Green	03	Slaten
City of St. Louis	MO	Green	03	Domneys
Kansas City	MO	Green	02	Slaten
St. Louis	MO	Green	01	Domneys
St. Louis County	MO	Green	02	Domneys
St. Louis University, School of Public Health	MO	Green	02	Domneys
Advanced Energy Corporation	NC	Green	02	Slaten
Charlotte	NC	Green	01	Slaten
City of Charlotte	NC	Green	03	Slaten
Greensboro	NC	Green	01	Slaten
Research Triangle Institute	NC	Green	02	Pinzer
Research Triangle Institute	NC	Green	03	Pinzer
Manchester	NH	Green	02	Hornbuckle
New Jersey	NJ	Green	03	Domneys
University of Medicine and Dentistry of New Jersey	NJ	Green	02	Domneys
Albany	NY	Green	01	Morales
City of NY	NY	Green	03	Morales
City of Rochester	NY	Green	03	Morales
City of Rochester	NY	Green	03	Morales
City of Syracuse	NY	Green	03	Morales
County of Erie, Dept. of Health	NY	Green	03	Morales
Environmental Education Associates, Inc/ ENABLE	NY	Green	03	Morales

Grantee	State	Assessment	NOFA Fiscal Year	GTR
Mount Sinai School of Medicine	NY	Green	02	Morales
New York City DEMO	NY	Green	03	Morales
New York City Environmental Quality Center, Inc.	NY	Green	03	Morales
Onondaga County	NY	Green	01	Morales
Syracuse	NY	Green	99	Morales
Urban Homesteading Assistance Board (UHAB)	NY	Green	02	Morales
Westchester County	NY	Green	03	Morales
Westchester County	NY	Green	03	Morales
Akron	OH	Green	02	Slaten
City of Toledo	OH	Green	03	Slaten
Cleveland DEMO	OH	Green	03	Domneys
Columbus	OH	Green	02	Slaten
Cuyahoga County	OH	Green	01	Slaten
Cuyahoga County Board of Health	OH	Green	03	Domneys
Mahoning County	OH	Green	03	Domneys
Mahoning County	OH	Green	99	Domneys
Newark	OH	Green	02	Domneys
Springfield	OH	Green	01	Slaten
University of Cincinnati	OH	Green	02	Ashley
University of Cincinnati	OH	Green	03	Domneys
University of Cincinnati	OH	Green	01	Domneys
University of Cincinnati	OH	Green	02	Domneys
University of Tulsa	OK	Green	01	Pinzer
Portland	OR	Green	01	Slaten
City of Erie	PA	Green	03	Domneys
City of Harrisburg	PA	Green	03	Domneys
City of Philadelphia	PA	Green	02	Domneys
State of Pennsylvania	PA	Green	03	Domneys
City of Warwick	RI	Green	03	Hawkins
Providence	RI	Green	02	Hawkins
Maryland Department of Housing and Community Development	MD	Green	03	Hawkins
Woonsocket	RI	Green	03	Hawkins
Shelby County	TN	Green	03	Morales
Austin	TX	Green	02	Hornbuckle
Fort Worth	TX	Green	01	Slaten
Houston	TX	Green	02	Slaten
Salt Lake County	UT	Green	02	Slaten
Lynchburg	VA	Green	02	Hawkins
Richmond	VA	Green	01	Baker
City of Burlington	VT	Green	03	Morales

Grantee	State	Assessment	NOFA Fiscal Year	GTR
Vermont	VT	Green	01	Morales
University of Wisconsin - Madison	WI	Green	00	Ashley
Cnty Action Partnership - LEAP	CA	Yellow	03	Daly
County of Santa Cruz	CA	Yellow	03	Daly
Long Beach	CA	Yellow	01	Choi
Richmond	CA	Yellow	01	Daly
Riverside county	CA	Yellow	02	Daly
Access Agency LEAP 1	CT	Yellow	02	Hornbuckle
District of Columbia	DC	Yellow	03	Hawkins
Energy Problems Consortium	DC	Yellow	02	Hawkins
Howard University (HBCU)	DC	Yellow	03	Hawkins
National Safety Council	DC	Yellow	02	Hawkins
City of New Orleans	LA	Yellow	03	Hawkins
Rhode Island Housing & Mortgage Finance Corp	RI	Yellow	01	Hawkins
Malden	MA	Yellow	02	Hornbuckle
Springfield	MA	Yellow	01	Hornbuckle
City of Baltimore	MD	Yellow	03	Hawkins
Connor Enviro. Svcs. - LEAP	MD	Yellow	03	Hawkins
Durham	NC	Yellow	02	Slaten
Rocky Mount City	NC	Yellow	02	Slaten
Chautauqua County	NY	Yellow	02	Morales
New York City	NY	Yellow	00	Morales
Utica	NY	Yellow	00	Morales
Cincinnati	OH	Yellow	02	Domneys
Cleveland	OH	Yellow	00	Domneys
Mahoning County	OH	Yellow	03	Domneys
Montgomery County	OH	Yellow	02	Domneys
Allegheny County	PA	Yellow	02	Domneys
City of Allentown	PA	Yellow	03	Domneys
City of Philadelphia	PA	Yellow	03	Domneys
Rhode Island	RI	Yellow	01	Hawkins
City of Memphis	TN	Yellow	03	Morales
Middle Tennessee State University	TN	Yellow	03	Morales
City of El Paso	TX	Yellow	03	Morales
City of Roanoke	VA	Yellow	03	Hawkins
City of San Bernardino	CA	Red	03	Daly
Los Angeles County	CA	Red	01	Choi
Indianapolis	IN	Red	02	Pinzer
Louisville/Jefferson County	KY	Red	02	Pinzer
Phoenix Science & Tech.	MA	Red	02	Pinzer
Vineland City	NJ	Red	02	Domneys
Monroe County	NY	Red	02	Morales

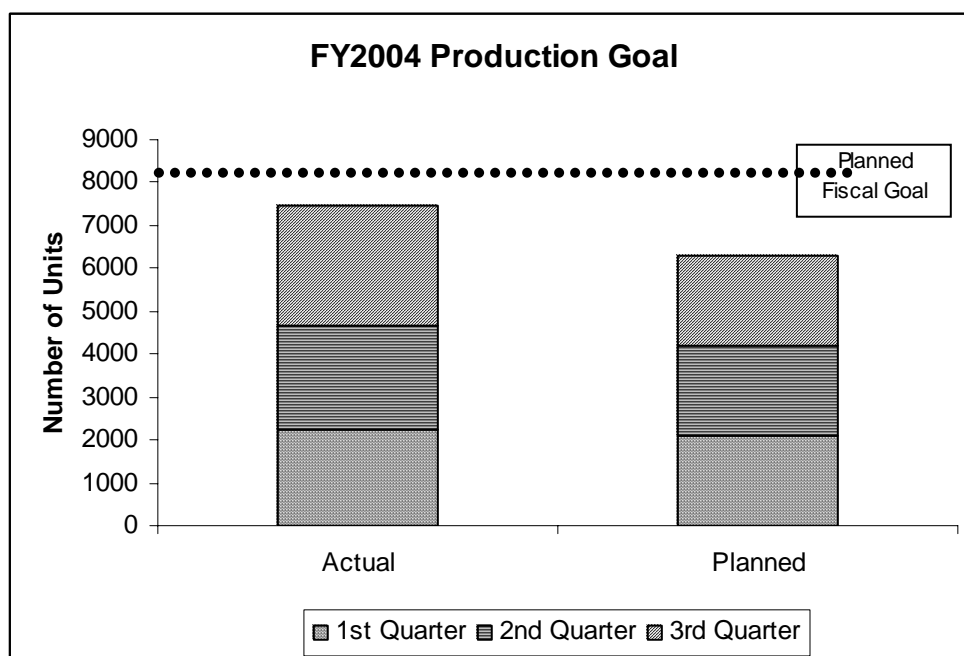
Grantee	State	Assessment	NOFA Fiscal Year	GTR
East Providence	RI	Red	02	Hawkins
Pawtucket	RI	Red	00	Hawkins
Virginia Department of Housing and Community Development	VA	Red	02	Hawkins

Lead-Based Paint Hazard Control and Lead-Based Paint Hazard Reduction Demonstration Grant Programs

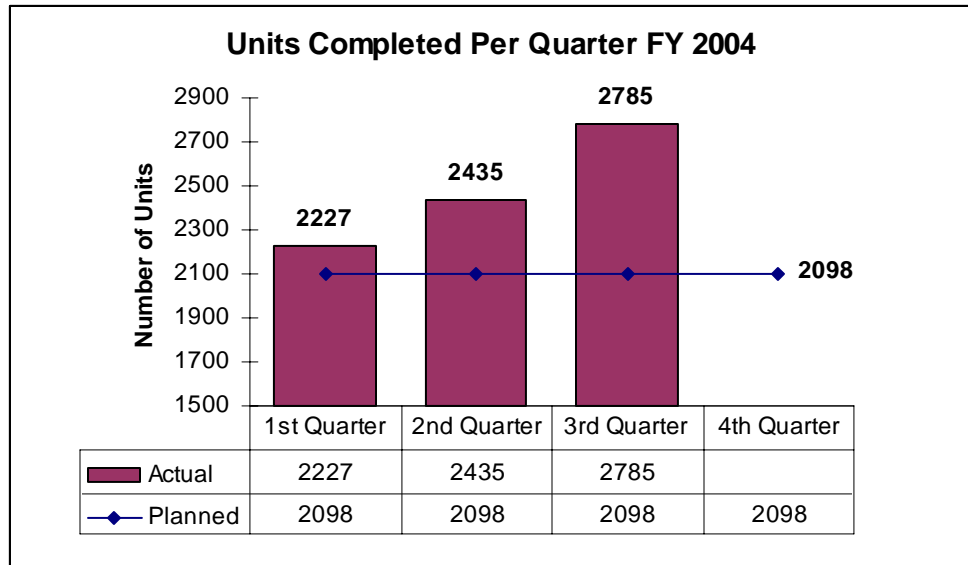
The Lead-Based Paint Hazard Control (LHC) and Lead-Based Paint Hazard Reduction Demonstration (Lead Demo) Programs is to help communities identify and control lead-based paint hazards in eligible, privately-owned housing. The purpose of the Lead Demo program is to do this work at high levels in areas with the greatest need.

Results – Goals

Three quarters through the fiscal year, the office has achieved 88 percent of its annual goal, having made 7,447 of 8,390 housing units lead safe for low income families with young children at the greatest risk of lead poisoning. This achievement is 18.3 percent above the planned third quarter cumulative goal of 6,294. In addition, grantees have increased their pipelines with the number of units in progress (3,881), which is 314 units greater than the number in progress last quarter. With this number of units in progress, the program is well positioned to meet its annual goal by the end of next quarter.



For the third quarter FY2004 reporting period, 2,785 units were made lead-safe (see chart). This represents a 20.5% increase over the same quarter in FY 2003 (2,311 units compared to 2,785 units). The program has been able to make such significant gains because of the addition of the Lead Hazard Control Reduction Demonstration program, whose production-oriented grantees account for 20 of the 50 Round 11 (2003) grantees. Cumulatively, the Lead Hazard Control Grant Program has made 60,653 housing units lead safe and has tested over 99,329 units for the presence of lead-based paint and lead-based paint hazards.



The Lead Hazard Control Grant Program's fiscal year 2004 goal is to make 8,390 housing units lead-safe. To meet this goal, the program initially set out a target of 2,098 units per quarter. However, over the last three quarters the program has completed an average of 2,482 units per quarter. If production stays at this level, the program will exceed its target.

Discussion

A review of the LHC Program production data for FY2004 indicated a 20.5% increase over the same reporting period in FY2003. This increase is due in part to the addition of grantees under the Lead Hazard Control Reduction Demonstration Program.

The following table shows production by grant round.

Summary of LHC Grantee Accomplishments			
	Round 9	Round 10	Round 11
Fiscal Year	2001	2002	2003
Start Date	3/1/2002	2/1/2003	10/1/2003
Number of Grantees	23	37	50
Units in 3-Year Grant Agreement	5,110	5,963	11,921
Percentage of Units Completed	83%	45%	4%
Median Percentage of Units Completed	89%	46%	0%
Maximum Percentage of Units Completed	178%	140%	29%
Minimum Percentage of Units Completed	5%	10%	0%

Specific Lead Hazard Control Grantee Accomplishments

Detailed grantee status production and expenditure reports for the reporting period April 1 to June 30, 2004 are provided in Attachment A. These reports sort grantees by funding round and

are used to help the OHHLHC determine the necessary technical assistance needed to improve performance and track planned milestones for major tasks/activities against actual performance. Specific program accomplishments during the third quarter of FY2004 include:

National/Local Capacity Building

Availability of Contractors: The Lead Hazard Control Grant Program has stimulated the creation of a large cadre of competent contractors and trained workers. This past quarter, grantees trained more than 5,000 individuals. Training ranged from Lead Abatement Worker and Supervisor training courses, refresher training for lead contractor/supervisor license renewal, lead-safe renovator training to contractors and landlords, loan or other incentive programs available to contractors, including grant funds to assist with EPA training and licensing, and medical screening fees, to Lead-Safe Work Practices training for property owners and contractors. A sample of activities conducted by grantees in the third quarter included:

- On May 2, St. Anthony's Catholic Church in Phoenix held a series of lead information breakfasts for three separate congregations, one in English and two in Spanish. The event was funded through a contract with **Phoenix's Lead Hazard Control Program (LHCP)**, and LHCP staff attended and provided educational materials and discussed lead poisoning prevention with attendees. The LHCP provided extra pamphlets for distribution at various future church events.
- **The City of New Haven's Lead Hazard Control Program** has used Lead Hazard Control Program funds to help start lead abatement contracting firms. HUD Lead Hazard Control funds helped start two, minority owned and operated lead abatement contracting firms. These two companies have been producing low budget, yet high quality lead abatements for non-profit developers as well as private homeowners. Through these two contractors, low income individuals, both male and female, have been trained and employed.
- **Boston's Department of Neighborhood Development's** efforts to expand its contractor pool yielded the participation of 64 contractors in a free one-day Lead Safety Training Program held in May. The program solicited all DND/Homeowner Services contractors (active, inactive and prospective) to attend.
- Seventeen additional companies, an increase of 16% from last quarter, became licensed lead abatement contractors during the quarterly period ending on June 30, 2004, bringing the total number of abatement contractors to 122 in the **Greater St. Louis Metropolitan Area**, including adjacent Illinois. Incentives such as tuition reimbursement continue to be offered to general contractors who obtain a Lead Abatement Contractor's and a Lead Abatement Supervisor's License, and who then complete one City-funded project involving lead remediation.

Development of Comprehensive Community Approaches

Collaborative Partnerships: The Lead Hazard Control Grant Program has stimulated the effective collaboration of local health, housing, and community development agencies as well as local faith-based and community-based organizations. Groups of parents of lead poisoned children also play a large role in collaboration efforts. Grantee accomplishments this quarter include:

- The **City of Woonsocket** worked with Childhood Lead Action Project on a major canvassing. 7,740 double-sided flyers were inserted with all water bills. The City inserts a program flyer & a DOH brochure ("Danger in Every Corner") with all minimum housing citations. The City sends information to all social service agencies, the media, and the public (through the posting of flyers). Childhood Lead Action Project is a partner in the City's LHC program. They also partner with Rhode Island Housing. In May and June, they held 3 education sessions (both in City Hall) (B4c&e). CLAP continues to canvass the area and reaches targets via events held with social service agencies(b5c&k). DOH continues to expanded into Woonsocket their "Keep Your Baby Lead Safe (KYBLS) program. City staff participated in DOH program planning session to aid in continued LHC grant funding for RI. Information continues to be given to city homebuyer program participants and realtors.CLAP wrote press releases as well as educational articles for agency newsletters (Thundermist and Connecting for Children). They also contacted new parents upon reading local birth announcements.
- The **St. Louis Lead Program** selected its service providers for its new Healthy Home Repair Program in April of 2004--the Catholic Commission on Housing and Beyond Housing/Neighborhood Housing Services. Under this new program, all properties receiving rehabilitation assistance will meet full building code compliance. In addition, all lead hazards will be remediated. The Building Division will conduct a risk assessment on all projects to detect any lead hazards, and remediation of such will be included in the scope of work. The Healthy Home Repair Program has several various funding sources--CDBG, HOME, Federal Home Loan Bank, and State and City Affordable Housing Trust Funds. It is expected that many participants of the program will also qualify for HUD Lead Grant funds, or the Building Division's Lead Remediation Fund (LRF). In such cases, the Healthy Home Repair Program funding will address the code and deferred maintenance home repairs, while the HUD Lead Grant or LRF will address the lead hazards. Also, as a requirement in order to receive funding under the Healthy Home Repair Program, each household is required to attend educational classes conducted by the Catholic Commission on Housing. One of the topics that is discussed in depth is basic awareness of lead hazards and how the family can protect individuals from lead hazards in their home.
- The **Coalition to Prevent Lead Poisoning** conducts outreach activities as a subgrantee to the **City of Rochester**. A major outreach accomplishment for the quarter was the Community Lead Summit, held in Rochester on June 10. A total of 489 people attended, including parents, health care providers, community organizations, political and business leaders and many others. Media coverage extended the reach to the community. In addition to speakers and workshops, the Summit featured a call to commitment. Seventeen groups and individuals, including the leadership of the political, educational, medical, and business communities stood before the community and made specific and actionable commitments. Among these are public policy changes that will create a primary prevention strategy at both the city and the county level.

Economic Opportunities for Low-Income and Minority Residents

- The **Hartford Lead Hazard Control** Program Manager has met with the staff from an area training company to build capacity among contractors. In addition, a meeting has been held with the Greater Hartford Minority Contractors Council to obtain a list of

contractors, and to encourage those who are lead certified to participate in the program. Lastly, letters went out to all contractors on file, notifying them of our plans to reapply for funding and encouraging their involvement with the program.

Healthy Homes Demonstration Grant Program

The purpose of the Healthy Homes Demonstration Grant Program is to develop, demonstrate, and promote cost effective ways to identify and remove multiple health and safety hazards in the home environment that cause serious health problems in children of low-income families.

Results – Goals

The Office of Healthy Homes and Lead Hazard Control has awarded \$39.4 million to 52 grantees in 21 states to help achieve HUD's strategic goal of developing safe and affordable housing. Efforts by the 39 current active grantees positively impact the lives of tens of thousands of young children. Healthy Homes grantees are successfully performing assessments and interventions, as well as providing healthy homes information to residents, property owners, and construction professionals.

OF NOTE

More than half a million people have been reached by programs funded by the Healthy Homes Grant Program.

While this quarter saw a 16 percent increase in the number of clients contacted, the number of clients enrolled decreased by approximately 29 percent. The number of units assessed, interventions completed, individuals trained, and individuals reached also declined from the second quarter. Programs will have to take steps to increase their enrollment rates in order to increase production to previous levels. A summary of results and cumulative totals is provided in the following table:

Performance Element	2 nd Quarter 2004	3 rd Quarter 2004	Cumulative Totals To Date
No. of Clients Contacted	3,942	4,574	92,161
No. of Clients Enrolled	669	477	3,970
No. of Units Assessed	635	414	5,574
No. of Interventions Completed	324	229	2,191
No. of Individuals Trained	1,458	458	8,384
No. of Individuals Reached	20,450	18,292 ¹	542,706

Discussion

Healthy Homes grant activities continue to identify ways to prevent or reduce the severity of childhood health programs, such as asthma, lead poisoning, and unintentional injuries, related to substandard housing. Healthy Homes demonstration projects create protocols (e.g., visual assessment, cleaning, interventions), develop instrumental methods, provide educational

¹ HUD: The quarterly reporting system reports individuals reached as 468,365 because the Medical Foundation (MALHH0118-03) counted the entire subscriber base of the Boston Globe as individuals reached because there was an article in the paper. We are adjusting this figure because other grantees with press attention do not count similar distribution and it distorts the totals for the quarter.

materials for children and adults, produce websites, and build capacity (train community health workers, interns, residents, and grantee staff) to carry out healthy homes assessments and interventions. Core programmatic elements of the Healthy Homes grants include:

- **Method Development** of assessment tools and intervention protocols to identify and repair housing-related hazards and evaluation of the effectiveness of these protocols.
- **Capacity Building/Training** for “high performance” housing that is energy efficient, durable, sustainable, healthy, and safe for occupants.
- **Assessments** of housing-related health and safety hazards that pose risks to the health of residents, particularly children in low-income families.
- **Interventions** to correct these hazards, together with the evaluation of the effectiveness of these interventions.
- **Education/Outreach** about healthy homes issues to individuals and the general public.

Some highlights and outcomes of the Healthy Homes Grant Program during the third fiscal quarter 2004 are presented below:

Method Development

- The **Research Triangle Institute** developed the following method for dust testing. Currently, cloth materials are offering the best collection efficiency, but other materials such as the Clorox Press n' Seal are still under investigation. All these materials have been identified through the internet or discussion with RTI staff that support the cleanroom industry. The test procedure consists of several steps. First, test dust (usually ELPAT material) is spread on a test surface; test surfaces include glass, linoleum, and wood. The test cloth is then either pressed onto the spiked surface, rolled across the surface, or, in some cases, wiped across the surface. The amount collected is determined by weighing the cloth before and after collection using a Mettler AT400 analytical balance good to +/- 0.1 mg. This gravimetric procedure has been used primarily as a screening method. Now that several good candidates for an acceptable material have been identified, the loaded cloths are being subjected to chemical analysis to achieve a more accurate measure of collection efficiency. The loaded cloths are being extracted using a microwave acid digestion procedure. This is the procedure used in the ELPAT program, "Standard Operating Procedure for Lead in Paint by Hotplate- or Microwave Acid Digestions and Atomic Absorption or Inductively Coupled Plasma Emission Spectrometry" (NTIS Publication No. PB-114172). Measurement is performed using a Leeman Prodigy ICP-AES; this is the same instrument that is used to verify the concentration of ELPAT performance evaluation samples. We turned to chemical analysis to increase accuracy, but also as a means of dealing with larger sheets (>3" x 4"), which are difficult to weigh, and also dealing with the use of extra adhesive sprayed onto the cloths; these adhesives outgas solvent with time and reliable weighing cannot be performed.

Capacity Building/Training

- **Medical Foundation** partner, the Boston Public Health Commission (BPHC) played a large role this quarter in helping to increase healthy homes awareness in Boston and surrounding areas. In May, the BPHC presented "Addressing Asthma from a Public Health Perspective" to 8 public health and CDC staff members. The BPHC reached 150 early childhood educators by presenting at "The Power of Partnering: A Symposium on Building Collaboration between Health Care and Early Child Care Education." The BPHC also reached 400 members of the general public by participating in the "Asthma Health and Screening Fair" on two separate occasions where they were able to distribute brochures on healthy home environments. BPHC participated in the open house, "Respiratory Friendly House-3 Murray Avenue" and reached out to 30 housing professionals and financiers. BPHC also attended the ARC Environmental Interventions Committee Meeting where 30 health professionals, healthy policy officials, and health advocates were present. The committee is exploring strategies to use medical insurance funds to support home assessment for environmental health threats. At New England's Asthma and Allergy Awareness Poster and Presentation meeting, BPHC staff was able to present housing and health information to 50 EPA staff members. Additionally, the BPHC took part in three conferences. At the 2004 National Asthma Conference they reached an audience of 500 attendees with their presentation on health and the home; at the Environmental Health and Justice Conference they reached 75 health professionals and researchers; and at the HUD Federal Grantees Conference they reached an audience of 100. BUAC also presented at these two conferences. They distributed healthy homes brochures at each of these conferences. The BPHC also distributed over 140 healthy homes brochures by participating in the following activities: the Mattapan CDC meetings, Partners in Prevention, Neighborwalk, and the Asthma Walk.
- The **Greater Cleveland Asthma Coalition (GCAC)** finalized the Greater Cleveland Asthma Resource Directory. All contacts of the GCAC received a copy of this resource directory in May. The development of the directory was one of the primary goals of the GCAC.

Assessment

- The **Coalition to End Childhood Lead Poisoning** continues to recommend that practical, safe hazard reduction measures be considered for adoption in all OHHLHC intervention programs. The Program's success in implementing a two-pronged environmental assessment/resident education initial site visit can also serve as a model for education, assessment, and low level intervention model for severely at risk communities. By combining the initial resident education and lead prevention cleaning distribution by Safe at Home's Community Health Educator with an environmental assessment and safety kit installation by the Environmental Assessment Technician, the Program has produced dramatic results in providing educational information on home-based health hazards as well as delivering and installing tangible prevention tools during the initial home visit. In addition to the comprehensive nature of this approach to healthy homes education and intervention, there have been practical benefits such as: a reduction in the number of missed appointments or no shows that result from a two home visit model to resident education and environmental assessment, increased

hazard interventions and immediate response times for at risk families who need hazard reductions, and a reduction in travel costs due to fewer site visits.

- The **City of Erie** performed one hundred forty-five (145) assessments this quarter. A total of forty-eight (48) or 33% of assessed units were registered as risk reduced. Interventions have occurred in 133 units, with 88 units having interventions pending.
- Fifty-six units have been enrolled in the **Mahoning County Healthy Homes Program** to-date. Eighteen units are in collaboration with Beatitude House (faith-based), a Working Partner, which are currently in process. Two units are in cooperation with Catholic Charities Housing Opportunities (faith-based), a Working Partner, which are currently in process. Four units are in collaboration with Children Service Board, a Working Partner. Twelve units are a joint venture with the Community Housing Improvement Program, a Working Partner. Twenty units are a joint venture with the City of Youngstown Community Development Agency.

In the 20 units in which assessments have been performed, the following interventions will follow in the set of specifications: installation of safety outlet plugs; clean gutters and downspouts, installation of gutter guards; replace outlet with GFCI receptacles; installation of new dedicated 20 amp circuit breakers; installation of bathroom fan with light; installation of smoke detector(s); installation of carbon monoxide detector; drywall plaster patch (visual evidence of previous mold problems); installation of powered clothes drier vent; installation of tub surrounds; installation of faucets; installation of glass bead on windows, replace broken glass; installation of de-humidifier(s); paint stabilize areas; installation of locking household chemical storage cabinet; installation of discharge tube on water heater pressure relief valve; snake the waste line; replace/repair concrete exterior steps; add rails to porch; install child safety gates; etc.

It was discovered that in one of the units, the drier vent was ducted into an empty wall cavity. The children were getting sick. The situation was repaired by installing an electric booster fan in the duct work to the outside. Another finding was that most units had an unlocked medicine cabinet with an outlet. A GFCI outlet was installed on the wall with the cabinet outlet disabled and/or cabinet replaced with a locking cabinet.

Interventions

- The **City of Phoenix** completed three types of interventions: behavior modification, supplies, and construction remedies. During this quarter 6 units were completed. The remedies utilized for these properties were:
 - Behavior modification:providing egress by removing obstacles; fire escape plan; bucket storage; securing window blind cords; safe storage of food, chemicals, matches, sharps, and medicines; smoking cessation or modification; proper use of alarms; how and when to change filters for air handlers;
 - Supplies:mattress and pillow covers, first aid kits, lists of emergency numbers, storage containers, space heaters, lock boxes for medications, vacuum cleaner, CO and smoke detectors, batteries, outlet covers, non-skid materials for rugs

- Construction: carpet removal and replacement with hard flooring, repair of plumbing and shower area to control mold, GFCI installation.
- While the **City of Minneapolis** has not yet completed any full interventions, the program did make an immediate impact on the indoor air quality in one unit. A couch and a number of cardboard boxes in a basement with water infiltration problems and dripping pipes were visibly growing mold. Moldy cat feces and a cat litter box were found in a basement and reported to be two years old, the owner removed these materials within a week of our bringing them to her attention.

Education/Outreach

- **Alameda County** has found two effective outreach formats. One format used this past quarter was a photo of Boric Acid and Combat Roach Gel. The photo has served as a visual aide during the presentation to assess if pests exist in the home. During the presentation, families are instructed on how to apply Boric Acid in areas where cockroaches have been observed. Families are provided with a dust detector vacuum cleaner and are encouraged to vacuum regularly to pick-up dead cockroach skeletons and to reapply boric acid to continue the elimination process. A second effective format currently being used is a booklet developed by The Soap and Detergent Association titled "Cleaning to Control Allergies & Asthma," developed for inner city families. Its colorful pages of before and after pictures of indoor asthma triggers location, and detailed explanations on what cleaners to use, how to keep the home dust free, how to control pests in the home and home cleaning maintenance are beneficial as an educational tool. This booklet is available in English, Spanish, and Vietnamese.

Technical Studies Grant Programs

The purpose of the technical studies grant programs is to research and improve methods for detecting and controlling housing-related health hazards. The OHHLHC has eight Healthy Homes Technical Studies and ten Lead Technical Studies grantees.

- The **University of Cincinnati** Healthy Homes Technical Studies grantee collected exterior entry HEPA vacuum dust samples from 29 houses this quarter. This brings the total to date to 36, 72 % of its goal of 50. Some of the units visited had been visited previously, but at that time it had not been possible to collect outside samples because of moisture. The power inverter made it possible to collect the samples without having to enter the home to secure an a.c. power connection. This caused less inconvenience for the family and made it possible to arrange for a more flexible time for sampling.
- **The University of Illinois**, a Lead Technical Studies Grantee, prepared paint samples and 10% acetic acid to extract lead, with the newly developed colorimetric lead sensor, colorimeter was used for the lead detection. A larger difference is associated with red color, indicating the presence of high level of lead, and vice versa. From figures, it can be observed that the extinction difference increased with increased lead level nearly linearly when lead level lower than 1mg/cm², indicating that the sensor system can

measure lead level with acceptable accuracy. On the other hand, the extinction difference curve has a sharp turn around 1 mg/cm², indicating that the sensor system has a performance close to the ideal response curve, and give positive indication when lead level higher than the Federal level at which a paint is classified as lead-based (i.e., 1mg/cm²).

- The **Harvard School of Public Health**, a Healthy Homes Technical Studies grantee, project team has had several more articles and papers published. Teams members have made presentations in a number of settings, including at the Tufts University School of Medicine, New England School of Law, National Environmental Justice Council, and the NIH.
- This quarter **Duke University Nicholas School**, a Healthy Homes Grantee, staff continued to evaluate the home environmental checklist. The checklist takes approximately 5-10 minutes to complete and targets general housing characteristics (including the presence of a crawl space), possible lead hazards, asthma and allergen triggers, pesticide use, and fire safety. The answers to these questions help field technicians determine appropriate sampling protocols and locations. Additional questions regarding the presence of pests and pest control programs were added. Revisions were also made to questions regarding moisture problems within the home.

Lead Outreach Grant Program

The Lead Outreach Grant program is intended to help communities increase enrollment in Lead Hazard Control programs and to develop and distribute educational materials to help residents identify and address lead hazards in their homes. The program started in 2003 and awarded six grants in the first year. Highlights of the past quarter include:

- **LeadSafe Charlotte** is targeting Latino residents of the community. The program partnered with Our Lady of Guadalupe for a Palm Sunday event that drew over 1500 Latino residents. LeadSafe Charlotte shared general lead safety information and introduced the LeadSafe Charlotte Spanish Hotline. In addition, LeadSafe Charlotte Latino representatives from Programa Esperanza, and CEO and Associates were Exhibitors at the Tamal Festival at the Methodist Park. The festival attended by over 150 Latino families and community agencies provided a day of resources and activities for the entire family.
- **Kansas City** conducted three events involving childcare/healthcare groups this quarter, and distributed materials to 1,512 persons at these occasions. Three parent group events, involving pre- and post-testing, had a total attendance of 38 people. Fifteen people attended a landlord/tenant group presentation. Finally, six community wide events (churches and health fairs) reached 366 individuals.
- The **City of Los Angeles** grantee provided Lead Safe Work practices training to 54 people. It also provided support for 15 people to attend the EPA Certification course for Lead Dust Sampling Technicians. In addition, more than 500,000 pieces of program information were distributed across the target area and to 38 groups.

Operation Lead Elimination Action Program

The purpose of the Operation Lead Elimination Action Program (LEAP) is for grantees to work with a network of partners to leverage private sector funds for lead hazard control activities. Activity highlights from the past quarter include:

- Local partners of the **Alliance for Healthy Housing** have begun their lead hazard investigations using CEHRC protocols. Some of the partners have expressed concern about how to access residents and their homes/units for sampling within the targetted communities. Round table discussions on this topic were held during the May and June grantee conference calls. Other partners who have had similar challenges put forth ideas for remedying the issue. One partner has had particular difficulties accessing homes due to immigration issues that concern undocumented residents who live in the community.
- **National Center for Healthy Housing's** program has several outreach goals: generation of applications; increased primary prevention in the pilot cities, and increased awareness and interest in replication nationally. Free media (newspaper) coverage in Rochester in February generated an increase in statements of interest and applications from March through June. Press coverage of the Syracuse event in May also increased phone calls to the Syracuse program. In general, brochures and informational meetings targeted to providers have generated the most statements of interest. One-on-one interviews with providers, followed up by multiple phone calls to assist in the application process, have been the most effective way to convert interest into applications.
- A unique aspect of **Environmental Education Associates' ENABLE** "Lead Connections" program is to provide training and assistance to owner-occupied or small (1, 2, 3 unit) tenant-based rental assistance housing. In most instances those receiving assistance are under mandate from a housing, health or enforcement agency to repair substandard housing conditions. Assistance is directed exclusively to property owners to conduct lead based paint stabilization and maintenance activities. Several local housing agencies have recognized the value of the program have begun to direct homeowners, landlords and contractors affected by the 1012/1013 subsidized housing requirements.

Assessing Grantee Performance

Government Technical Representatives evaluate grantee performance on a quarterly basis relative to the core programmatic elements of the Healthy Homes Program, as applicable to an individual grant. GTR evaluations are used to help the OHHLHC determine the technical assistance needed to improve performance.